

TWO LEAF SPOT DISEASES OF SPANISH BAYONET

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Spanish Bayonet, *Yucca aloifolia* L., is subject to two leaf spot diseases which are very common and so conspicuous as to attract the concerned attention of nurserymen and amateur gardeners alike.

SYMPTOMS. Brown leaf spot caused by the fungus *Coniothyrium concentricum* (Desra.) Sacc., is characterized by brown, oval, slightly sunken lesions, measuring from 5 mm to 25 mm in length. The newly formed spots are light brown with a dark brown center. Mature spots are darker brown to almost black and show concentric zones of lighter and darker leaf tissue. Several spots may unite to form larger lesions of varying size and shape (Fig. 1).



Fig. 1. Brown leaf spot on Spanish Bayonet. A. Upper leaf surface. B. undersurface.

The center of mature spots is slightly raised, always darker in color than the surrounding infected tissue, and carries the fruiting structures of the pathogen. Whether these fruiting structures represent the imperfect stage (*C. concentricum*) or the perfect stage (*Leptosphaeria obtusispora* Speg.) of the same pathogen, is immaterial relative to the shape and color of the leaf spots.

Grey Leaf Spot and Tip Necrosis. This disease is caused by the fungus *Cytosporina* sp. Sacc. Tip necrosis is the more common symptom, although spots along the margin and on the leaf blade usually can be seen on the same plant. The color of the lesions is predominantly grey with a brown margin, often with concentric zones of darker and lighter color (Fig. 2).

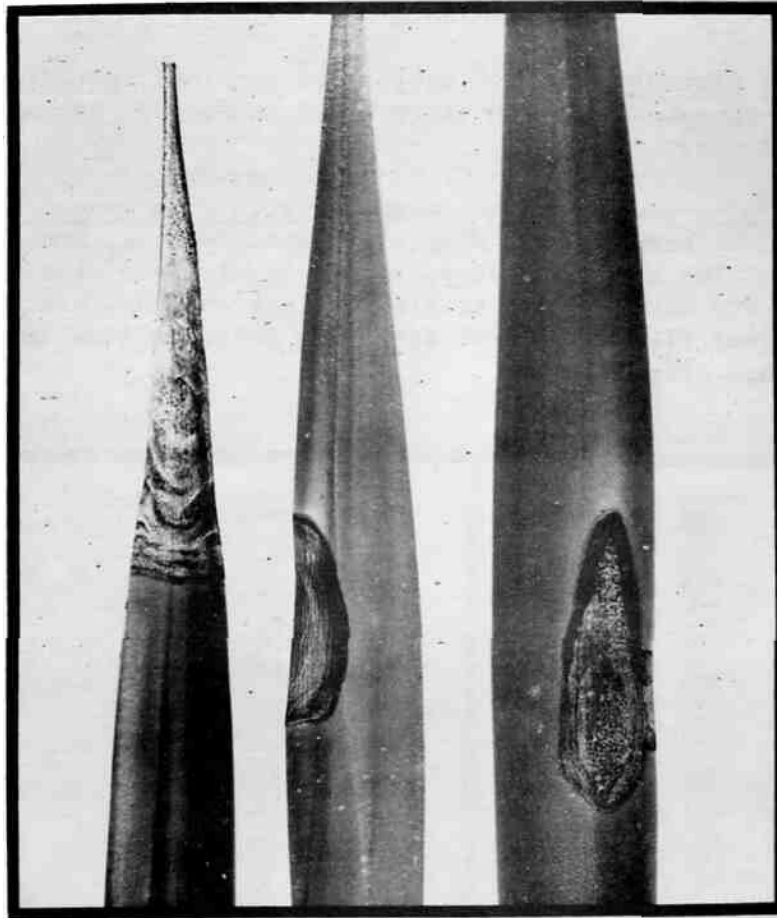


Fig. 2. Grey leaf spot and tip necrosis on Spanish Bayonet on the upper leaf surface (left and right) and on the undersurface (center).

On the grey part of the lesions small, black spots are visible to the unaided eye. These are the fruiting structures of the pathogen.

The grey leaf spots are much larger than those caused by the brown spot fungus and measure up to 70 mm in length. The tip necrosis starts at the leaf tip and gradually encompasses a large part of the leaf.

Both brown spot and tip necrosis are generally found on the older leaves of the plants. It is not clear whether the younger leaves are more resistant than the older, more mature leaves. Sobers (1) obtained lesions on leaves of young *Yucca aloifolia* plants under greenhouse conditions 7-12 days after inoculation with *C. concentricum*.

CONTROL. Control measures have not been established but it is very likely that regular applications with effective fungicides such as Daconil, maneb or zineb will adequately protect the leaves from infection. Once the leaf spots and dead leaf tips appear, it is recommended that the infected leaves be removed.

1. Sobers, E. K. 1967. The perfect stage of *Coniothyrium concentricum* on leaves of *Yucca aloifolia*. *Phytopathology* 57:234-235.